

Abstract

A beneficiated fiber and composite including a fiber having a lumen with voids. A suspension including a bonding agent, chemical blowing agent, and catalyst is drawn into the lumen by a capillary action to beneficiate the fiber. The beneficiated fiber may be imbedded with a polymeric material to form the composite. The natural voids of the lumen are preserved by the suspension causing the fiber to maintain natural density and strength characteristics.